

## INTELLIGENT INTERRUPT WITH HYPERVISOR COLLABORATION

## Abstract of the Disclosure:

An apparatus, method and program product for controlling the transfer of data in a data processing system having a processor handling an I/O request in an I/O operation, main storage controlled by the processor for storing data, and one or more I/O devices for sending data to or receiving data from said main storage. The apparatus includes a vector mechanism operable to register I/O requests by the devices to send or receive data from said main storage. A dispatcher is included which is operable to poll the vector mechanism to determine if there is an outstanding I/O request. An override bit has a first condition when an immediate interrupt is to be sent to the processor for handling an I/O request from the I/O device(s), and a second condition when the dispatcher is to poll the vector mechanism to determine if there is an outstanding I/O request. The override bit is set to its first condition or reset to its second condition by the processor.